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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,874	01/09/2004	Hans Joachim Halamoda	7863-80940	6117

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EXAMINER

NGUYEN, PHONG H

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/753,874	Applicant(s) HALAMODA ET AL.	
	Examiner Phong H Nguyen	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the transverse direction" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson (4,092,888).

Regarding claim 1, Wilson teaches punching device capable of punching holes on a ceramic substrate comprising:

a receiving device 11, which has a substantially flat receiving face for a ceramic substrate (W), and in which a punched hole 12 is embodied; at least one die, which disposed above a punched hole 12 and has a shaft and an operative portion that extends through a stripper opening 32

and whose diameter is less than the diameter of the shaft and greater than the diameter of an associated punched hole 12, and the operative portion has a punching portion whose diameter is somewhat less than the diameter of the punched hole;

a drive mechanism 15, which is connected in driving fashion to the die in order to move linearly by a defined stroke and in the process to move the punching portion into the punched hole and out of it; and

a die guide device 13, through which the shaft extends and which guides the die at its shaft (15). See Figs. 1 and 5.

Regarding claim 2, the upper portion of the punching portion is unguided in the transverse direction in a ready state as shown in Figs. 1 and 5.

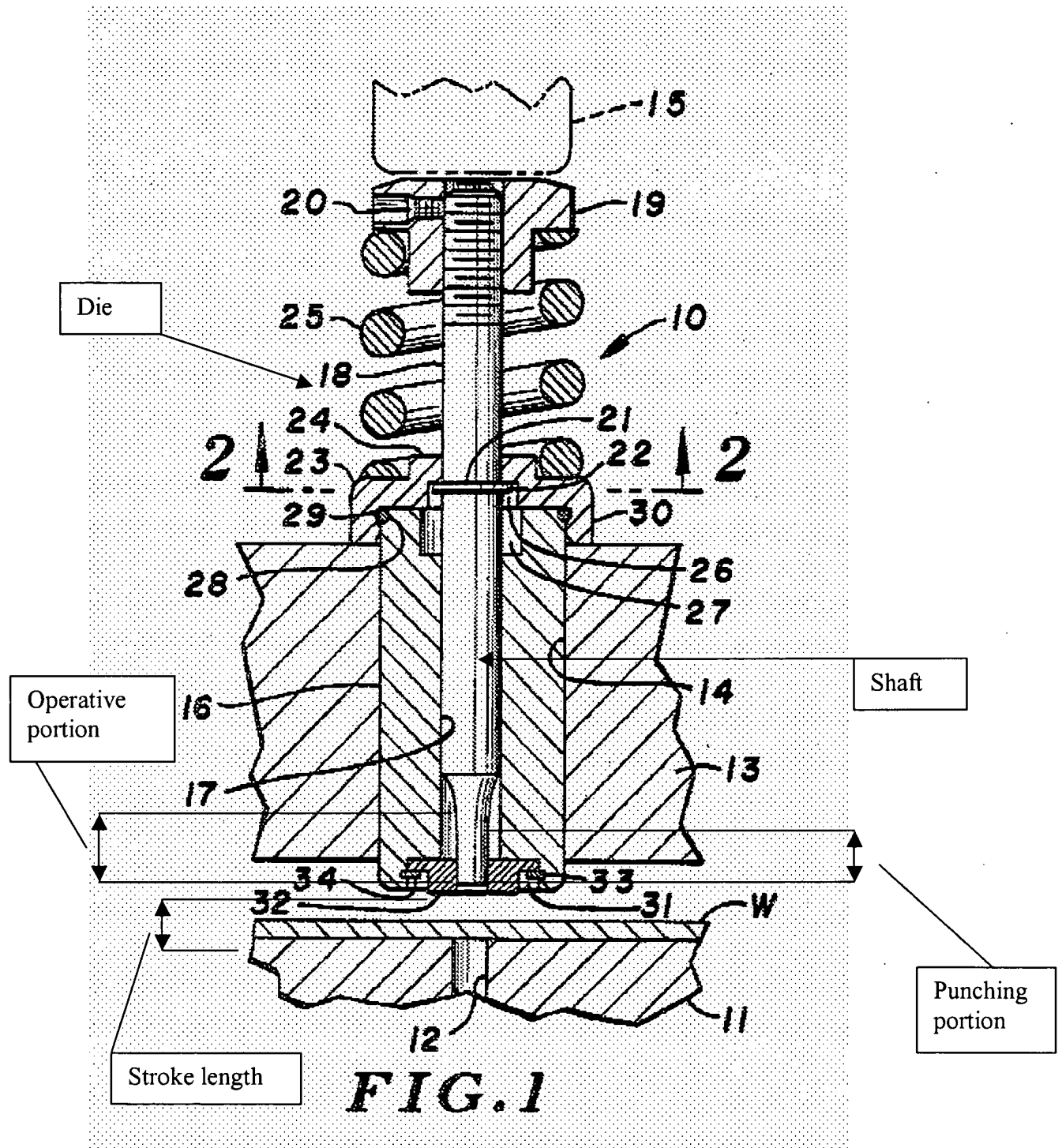
Regarding claim 3, the guide device 13 having a bush 16 with a passage 17 is best seen in Figs. 1 and 5.

Regarding claim 5, it appears the length of the punching portion is equal to the length of the stroke of the drive mechanism. See Fig. 1.

Regarding claim 6, it appears that the length of the operative portion is greater the stroke of the drive mechanism. See Figs. 1 and 5.

Regarding claim 7, the punched hole 12 is best seen in Figs. 1 and 5. A slug conduit having a greater diameter than the punched hole for guiding punched pieces to a scrap bin is inherent in a punching system as evidenced by Hugo (4,246,815). See element 10 in Fig. 1.

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5. Claims 9-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kranik et al. (4,425,829), hereinafter Kranik.

Regarding claims 1, 9 and 18, Kranik teaches punching device comprising:

a receiving device 42 having a substantially flat receiving face for a ceramic substrate 44, and having a punched hole 50 formed in the flat surface;

a die disposed above the punched hole, the die having a shaft (the portion of element 16 that disposed in element 12), and an operative portion (the portion of element 16 that disposed in element 14) that extends through and is guided in a stripper opening (formed by a stripper plate 14) disposed above the punched hole, the operative portion including a first part that is guided by a surface defining the stripper opening and has a diameter that is less than the diameter of the shaft and greater than the diameter of the punched hole, and a second punching part 30 that is disposed at a lower end of the first part, and has a diameter that is less than the diameter of the first part and slightly less than the diameter of the punched hole;

a drive mechanism connected in driving fashion to the die to move the die linearly by a defined stroke and in the process move the punching part into and out of the punched hole; and

a die guide 12 through which the shaft extends and which guides the die shaft.

See Figs. 1 and 2.

Regarding claim 8, the diameter of the shaft is a multiple of the one of the operative portion. See Fig. 1.

Regarding claims 10 and 19, a cylindrical shape of the shaft, and the first and second parts of the operative portion is best seen in Fig. 1.

Regarding claims 2 and 11, see Fig. 1.

Regarding claims 3 and 12, a bush surface formed by element 34 is best seen in Fig. 1.

Regarding claims 4 and 13, the stripper opening is best seen in Fig. 1.

Regarding claim 5, 6 and 14-16, the length of the punching part must be equal or greater than the stroke of the drive mechanism so that the punching portion is always within and guided by the stripper opening.

Regarding claim 7, a slug conduit in element 42 is best seen in Fig. 1.

Regarding claims 17 and 20, providing the diameter of the first part being less than the diameter of the stripper opening by a clearance amount is routine skill in the art.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (4,092,888) in view of Kanawaza et al. (5,600,992).

Wilson teaches the invention substantially as claimed except for the length of the stripper opening. Kanawaza et al. teach providing a stripper 45 having a length that

exceeding the length of a punching portion 46. See Figs. 3 and 4. Therefore, it would have been obvious to one skilled in the art to provide a stripper having a length that exceeding the length of a punching portion as taught by Kanawaza et al. to the punching assembly of Wilson as an alternative combination of a stripper and a punching portion.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (4,092,888).

Wilson teaches the invention substantially as claimed except for the relative stroke's length of the driving mechanism with respect to the operative portion and the punching portion. One skilled in the art would have been motivated to adjust the stroke's length with respect to the length of the operative portion and the punching portion so that they can penetrate through a work piece.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (4,092,888) in view of Hugo (4,246,815).

To the degree that Applicant would argue that a slug conduit is not inherent in a punching system, claim 7 is rejected over Wilson and Hugo. Wilson teaches the invention substantially as claimed except for a slug conduit. Hugo teaches a slug conduit in a punching system for guiding punched pieces to a scrap bin. See element 10 in Fig. 1. Therefore, it would have been obvious to one skilled in the art to provide a slug conduit as taught by Hugo to the punching system of Wilson for guiding punched pieces to a scrap bin.

Response to Arguments

10. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Applicant's arguments with respect to claim 1, Applicant did not define the diameter of the punching portion with respect to the operative portion. Thus, Wilson anticipates claim 1.

Regarding Applicant's arguments with respect to claim 2, a portion of the punching portion is unguided in a ready position as shown in Fig. 1. Thus, Wilson anticipates claim 2.

Regarding Applicant's arguments with respect to claims 5 and 6, since Applicant did not define the significant relationship of the stroke length and the length of the punching portion, the Examiner could arbitrarily choose the minimum possible stroke length.

Regarding Applicant's arguments with respect to the slug conduit in claim 7, the slug conduit is inherent in the punching system as shown by Hugo and Kranik.

Regarding Applicant's arguments with respect to the rejection of claims 5 and 6 under 35 U.S.C 103 that it was contrary to the position taken in 35 U.S.C 102 rejections, since claims 5 and 6 were broad and could be rejected under both 35 U.S.C 102 and 103, the Examiner presented two possible rejections so that Applicant can amend the claims to overcome the prior art.

Conclusion

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phong H Nguyen whose telephone number is 571-272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PN: *pn*

January 19, 2005



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Group 3700